Single Number (View)

Given a **non-empty** array of integers `nums`, every element appears *twice* except for one. Find that single one.

You must implement a solution with a linear runtime complexity and use only constant extra space.

Example 1:

```
Input: nums = [2,2,1]

Output: 1
```

Example 2:

```
Input: nums = [4,1,2,1,2]

Output: 4
```

Example 3:

```
Input: nums = [1]

Output: 1
```

Constraints:

- $1 <= $ nums.length $ <= 3 * 10^4$
- $-3 * 10^4 <= $ nums[i] $ <= 3 * 10^4$
- Each element in the array appears twice except for one element which appears only once.